**MM803 Assignment 1 Report**

**Xinyao(Alvin) Sun**

**1251167**

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| **RGB-Image 1** |
| **rgb1** |
| **RGB-Image 2** |
| **D:\Code\MM803\Assignment1\Report\rgb2.jpg** |
| **RGB-Image 3** |
|  |
| **RGB-Image 4** |
|  |
| **RGB-Image 5** |
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| **RGB-Image 6** |
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| --- | --- | --- | --- | --- | --- | --- |
| **Jaccard score** | | | | | | |
| **RGB** | **D:\Code\MM803\Assignment1\Images\1.png**  **1** | **C:\Users\Alvin\AppData\Local\Microsoft\Windows\INetCache\Content.Word\2.png**  **2** | **D:\Code\MM803\Assignment1\Images\3_.png**  **3** | **D:\Code\MM803\Assignment1\Images\4.png**  **4** | **D:\Code\MM803\Assignment1\Images\5.png**  **5** | **D:\Code\MM803\Assignment1\Images\6.png**  **6** |
| Threshold Method | 0.202720 | 0.130223 | 0.202629 | 0.298617 | 0.105205 | 0.215090 |
| K-means Method | 0.238717 | 0.206538 | 0.220378 | 0.230403 | 0.220852 | 0.259803 |
| Efficient graph-based | 0.168130 | 0.067418 | 0.086480 | 0.059625 | 0.064588 | 0.103564 |
| Random walks | 0.167493 | 0.004541 | 0.221481 | 0.139713 | 0.065012 | 0.203376 |

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| **HSV-Image 1** |
| **C:\Users\Alvin\AppData\Local\Microsoft\Windows\INetCache\Content.Word\hsv1.jpg** |
| **HSV-Image 2** |
|  |
| **HSV-Image 3** |
|  |
| **HSV-Image 4** |
|  |
| **HSV-Image 5** |
|  |
| **HSV-Image 6** |
|  |
| **C:\Users\Alvin\AppData\Local\Microsoft\Windows\INetCache\Content.Word\hsv1.jpg** |

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| --- | --- | --- | --- | --- | --- | --- |
| **Jaccard score** | | | | | | |
| **HSV** | **D:\Code\MM803\Assignment1\Images\1.png**  **1** | **C:\Users\Alvin\AppData\Local\Microsoft\Windows\INetCache\Content.Word\2.png**  **2** | **D:\Code\MM803\Assignment1\Images\3_.png**  **3** | **D:\Code\MM803\Assignment1\Images\4.png**  **4** | **D:\Code\MM803\Assignment1\Images\5.png**  **5** | **D:\Code\MM803\Assignment1\Images\6.png**  **6** |
| Threshold Method | 0.120836 | 0.160546 | 0.189507 | 0.124280 | 0.171613 | 0.224198 |
| K-means Method | 0.360137 | 0.130170 | 0.202209 | 0.344022 | 0.070581 | 0.213132 |
| Efficient graph-based | 0.057183 | 0.029801 | 0.121913 | 0.054408 | 0.022019 | 0.031316 |
| Random walks | 0.062627 | 0.003151 | 0.170977 | 0.153316 | 0.024179 | 0.245419 |